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LANDSCAPE GARDEN SERIES



I. Introduction, History and Design

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Fig. 1—An Italian garden in which an architectural use has been made of plant material without giving an expression of an over-formal garden composition

LANDSCAPE GARDEN SERIES

HISTORY AND DESIGN

BY
RALPH RODNEY ROOT, B. S. A., M. L. A.



THE GARDEN PRESS

DAVENPORT, IOWA

PREFACE TO THE LANDSCAPE GARDEN SERIES

"I never had any other desire so strong and so like to covetousness, as that one which I have had always, that I might be master at last of a small house and a large garden."

—Abraham Cowley, 1618-1667.

ARDENING is one of the most inexpensive and entertaining pastimes the year round. The gardening year is divided into four regular seasons: winter, or planning time; spring, or planting time; summer, or enjoyment time; autumn, or the season for the harvest of vegetables and fruits. A study of the average home grounds in America seems to show that few people have grasped the principles of garden design or have given to this phase of home making the attention that it deserves.

The object of the Landscape Garden Series is to serve as a guide to garden care and planning. It is not the object of the authors to cover each subject, of this series, in an exhaustive manner, but rather to include in these books such information as will be found helpful in planning and caring for private places.

It has been the endeavor of the writers of this series to avoid sentimental effusions upon incidental details of gardening. Such articles and books upon the subject of gardening have done untold good in arousing interest in this fascinating pastime, but it has seemed to the authors of this series that their inspirational literature is not supplemented frequently enough by clear exposition of the fundamental theories of good planning, and by practical information as to how these ideas may be carried out.

The material in these booklets has been arranged so that each phase of landscape work can be studied conveniently and the separate books used as a part of the garden equipment. There is necessarily some duplication in the various papers of the series. It was thought best, in many cases, to permit this duplication, especially when such repetition assists in driving home certain fundamental principles.

If through these books a desire can be created for better designed home grounds, and if these books will assist the home owner in making this desire a reality, the authors will feel well repaid for the thought and care which has been required in the arrangement of the material.

OUTLINE

LANDSCAPE GARDEN SERIES

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- II. Design

BOOK II. PLANNING THE HOME GROUNDS

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- IV. Walks and Drives
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 - XI. Plants for Unprotected Places Along Lake or River Fronts
 - XII. Plants Adapted for Various Soil Conditions
- XIII. Plants for Rock Gardens
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CHAPTER I

HISTORY

THE enjoyment of designing, building, and caring for gardens, together with the pleasure of studying natural landscape has been since the earliest times a favorite subject for authors and students, so that we have very good data for the study of the growth of landscape gardening from the earliest times up to the present date. Although many of the earlier gardens are no longer existing, and many styles of landscape gardening have lasted only for comparatively short time, each of these has left behind it something worth being copied, so that many of the gardens we see at the present time combine features that were used in the earliest gardens. While the gardens of the different countries differed a great deal both in their arrangement and the plant material used and in the use of the gardens themselves, we find in many cases the same features, such as water,



Fig. 2-Gateway. An American Estate

D. H. HILL LIBRARY North Carolina State College walls and walks, being used in such a way as to take advantage of the climatic conditions or the particular use required of each.

EGYPTIAN GARDENS

In the earliest gardens of which we have a record—those of ancient Egypt,—we have fairly accurate data back to 3000 B. C. in records on an Eygptian tomb,—on that of Amten,—we find a carved inscription which gives us an excellent idea of the arrangement and planting of these early gardens. This particular garden contained an area of almost 130 thousand square feet, in which was located a dwelling house and the necessary service building, with the whole scheme arranged in such a way as to make the best possible use of the land. Provision was made for shade by the use of trees, and coolness by the use of pools of water.

Many of the ideas of early Egyptian gardens were taken to Persia where the garden became more decorative, and we find here water used for the purpose of reflection, the trees being used more for their flowers and odor.

ROMAN GARDENS

The best of the earlier gardens were those of the Romans, in which we find combined the best ideas of the Egyptians, Persians and



Fig. 3-An English Estate

Greeks. The larger of the Italian gardens were located on the hillsides which required the use of terraces, and the garden was made very decorative by the use of steps and ramps and balustrades. Fountains were provided on the terraces starting at the top of the garden and playing down the terraces until the lower level was reached, where the water was caught in large pools where it was used for reflection.

The most of the planting in these gardens was for the purpose of adding to the architectural features of the whole scheme. The house and grounds were made a single composition in arrangement, and for the first time we have the whole landscape brought in as part of the composition by the framing in of attractive views which could be seen from the garden. A special provision of the arrangement of these gardens was the use of axis lines in such a way as to give balance and formality so as to give the gardens greater decorativeness and beauty. With the fall of Rome the gardens in Italy began to decline, but there still were many of the beautiful gardens of the villas. Among the most attractive of the gardens are those of the Villas d'Este Atdobrandini, Lante and Medici.

ENGLISH GARDENS

A country in which the idea of gardening has been developed to a very high degree is that of England. We have several different styles of gardening, the most important among the early ones being the Tudor Gardens, where we have the garden developed as a thing by itself, and in many ways similar to the Egyptian gardens. An arrangement of walls and gates protected these early castle gardens which contained the vegetables, flowers and herbs for the family who lived in the castle adjacent.

The Elizabethan gardens which followed closely upon that of Tudor, were located in such a way as to have more architectural relation to the house. These gardens became more decorative and were very similar to our present day flower gardens, having quite a little formality of arrangement and a use of plant material to secure rather broad effects.

The real Elizabethan gardens begin with the 16th century and continue through until the middle of the 18th, thus making the date of



Fig. 4-Villa D'Este, Italy

Elizabethan gardening from 1550 to 1750, covering a period of about 200 years in garden planning. We have traced the development of the English garden from the castle garden, the outgrowth of which was the Tudor garden, and now we have come to a period of gardening in England which we will find to be very distinctive.

Up to this time the general care of the garden, such as it was, had not occupied very much of the owner's thoughts, but with the introduction of many new species and varieties of plants from other countries, particularly Holland and America, we find a new type of gardening, with the interest centered largely in the plants, taking a new lease on life, and the owners devoting much of their time to their gardens. Again an analogy may be drawn between gardening and history, or more properly speaking, between the history of a country and its gardening proclivities. The time of the reign of Elizabeth and the succeeding kings found England in a comparatively wealthy state, particularly the reign of Elizabeth, for one of her chief policies was frugality, and her reign was marked by increased resources; therefore, during this prosperity and freedom from wars, the people were given the opportunity as well as the means to improve their gardens, and to turn their attention to the more peaceful pursuits. It was cutomary at this time for the garden owner to know the names of practically all of the plants that were contained in his garden, and to superintend the laving out of the beds.

At the time of the castle garden, because of the many wars which occurred, the gardens were more utilitarian than aesthetic. The transition from this period to the Tudor period shows an increase of plants used for their beauty as plants, but the gardens were still mainly practical. The garden arrangement now consisted of a large sunken garden, in which all the plants were grouped, both flower and vegetable, but with the introduction of the Elizabethan Garden, we find the tendency developing to separate the flowers from the vegetables, and a more definite arrangement of the garden parts as to use. For instance, the vegetables were now planted in the kitchen garden, which was carefully screened from the more private parts of the estate. The plants which were used for their decorative values appeared now in the flower gardens and in mass planting, pleached alleys, bowling greens, and all the other garden features which we have come to

associate with the Elizabethan garden, became more distinctly set apart, each in its proper place. Plants were selected now for special characteristics which they exhibited, such as time of bloom, color of blossoms, or leaf and height.

Soil and soil conditions became of much more importance than in former times and the location of the planting groups was very carefully studied; much attention was given to the arrangement of the garden area as to color, and plants were grouped according to this medium. At this time, many plants were brought over from America and many wild plants were introduced into the gardens, the great care was exercised in the placing of these plants, so that the proper soil conditions, or those as nearly like that to which they had been accustomed, might be provided for them, thus insuring the best results in the matter of acclimatization. This is the only style of gardening that has ever been developed in which the plant material was used in just this way.

The growth of the English garden was never one of quick changes, but rather a gradual development. At this time the garden was strictly in connection with the house, the architectural details being repro-



Fig. 5-A well designed American garden, showing old world influence

duced in the embroideries in the portieres, the shape of the garden following as closely as possible that of the house,—in short, the garden was as close a replica of the house as was possible.

These gardens were usually built on one of three sorts of locations. on a hillside with the house at the top and the terracing towards the bottom of the hill, on a hillside with the house at the bottom, and the terracing going up the hill, and on practically level ground. A feature was made of the terrace wall and we find in gardens where the topography was practically level that a terrace was provided and the terrace wall made quite an important feature in the design of the Some time the wall was ornamented and not covered with vines, in other cases a hedge was planted along the wall or it was covered with roses or vines. The terrace walls were supplied with buttresses to support the terrace, which were used as a sort of division into areas for the garden space, and this was made use of in the planting scheme. For instance, in the space between two buttresses, which made sort of a niche, the planting would follow a color scheme of perhaps blue; in the next two red would predominate as a color; the next two would be planted again with blue, and so on; also sometimes various ornaments such as statues, vases, etc., were placed in these niches. These same color schemes would be carried out on to the next garden terrace in gardens where there were several terraces, and where possibly the line of color was continuous from one terrace to the next.

This terrace in a way, superseded the mount, altho the mount was still used. With the larger growth of the garden, it became necessary to provide a better means of surveying the garden as a whole, which the mount could no longer provide, and, therefore, the terrace was utilized for this purpose and was so placed as to give a view of the whole garden and as much of the surrounding scenery as the owner wished to include.

Broad walks made of sand, turf, gravel, etc., which were called "forthrights" were laid out on a plan corresponding to the plan of the building to connect the various parts of the garden, thus dividing them as the walls of the house divide the house into rooms. Smaller walks running parallel to the terrace were provided. The spaces which were made between these walks were filled in with parterre beds and flower gardens, edged with stones, box or other plants of a like nature.



Fig. 6—An English estate with open lawn and pleasing composition of architecture and planting

The patterns employed in these beds in many cases were similar and sometimes exact reproductions of the details of the architectural decoration of the house. Many geometrical features were used.

In many instances these terrace walls were planted as wall gardens, or covered with hedges or fruit trees. There were usually three gates to the estate, the postern or field gate, the main gate through which the owner and his family and usual guests entered, and a special gate used only in the case of visits by royalty or guests of higher rank. These gates were ornamented with vases, etc. Many of these gates were of wrought iron and represent some of the finest types of this art which have ever been produced.

The mount was usually provided with an arbor and some seats, but in the cases of the very wealthy garden owners elaborate banquetting houses were erected thereon. Sometimes when a masque was to be given, or a pageant (for this age delighted in such festivals), temporary structures, which were covered with vines and made of some flimsy material, were erected for the occasion.

Many of the gardens had mazes or labyrinths, and quite often these were supplied with trick or surprise fountains which would suddenly play, thus giving the lost one a thorough wetting.



Fig, 7-A temple on a lake

Topiary work was much used in these gardens, having been introduced into England at the time of William and Mary, from Holland, where it was carried to great extremes. Many quaint designs were worked out in yew and box, such as the twelve disciples, reindeer hunts, various goddesses and gods at play, etc.

The use of pools was not as general as that of fountains. Nearly every garden had a "grand fountain" in the center of the formal garden. Many small surprise fountains were arranged in various parts of the gardens, as iron trees whose twigs would suddenly rain streams of water on the persons walking beneath, sundials which suddenly jetted up water when one stopped to read the time of day, etc.

The greatest characteristics of the people of this time was their love for growing plants for decoration and for the plants themselves.

It was the excesses for gardening, particularly in the use of topiary work that caused the springing up of what came to be called the "naturalistic" style of gardening, but before this area of gardening began, there came what was much more harmful to beautiful gardens than a war could ever be,—a period which we have come to call the "period of garden craze". At this time the influence of the gardens on the continent became more marked. People began to lose all originality of style and slavishly copied these gardens. Not content with copying the details of these gardens, they introduced the whole garden into their estates and came to be content with no less than four or five different styles. This garden craze period came about 1675 and lasted until the time of Repton.

The first type of continental garden to influence the English garden was the Italian garden and with its influence was brought the worst features of the rococo period. Loggies, vases, fountains, carpet bedding, etc., appeared at this time as did also grottoes and other water features. Little attention was paid to the proper arrangement of these details, the aim being simply to include them.

Because the French gardening had received much of its stimulus from the Italian example, although worked out on different lines, nevertheless the French influence was largely responsible for the influence of the Italian garden, because the later French and Italian gardens were both addicted to rather florid ornaments.

Through the French also came the Dutch influence with its excessive use of topiary and bedding plants. The Dutch was much like the French in general. The French gardening at this time was characterized by large, open areas, artificial hills and valleys; that is, they

simply made the topography suit their needs, and this soon became the prevalent style in England.

Versailles, the famous palace of the French kings, near Paris, France, was designed by Le Notre in the seventeenth century, and is a distinct and characteristic achievement of the period of Louis XIV and set the fashion for some time until displaced by the English style.

With the introduction of these three types of gardens, many more freakish styles were introduced, and an attempt was made to introduce into England, a kind of garden in which all the elements were to be symbolic, such as the stepping stones, trees, etc., of the Japanese garden. The idea of the garden owners at this time seems to have been for each man to try to outdo his neighbor in the creation of as many styles of gardens, all on one estate, as he could conceive. The beholder was led from one style to another, French, Dutch, Italian, Chinese, Japanese, etc., and as a last enormity, they even tried to create gardens symbolic of mythology, caves, grottoes, gardens depicting the terrors of the lower regions, etc. The visitor to these gardens was supposed to view each one with increasing awe and amazement and no doubt they did.

In about 1750 a man by the name of Kent made his appearance in gardening work and from that time dates the worst affliction that has ever been visited upon gardening. His idea was to create a naturalistic effect, nothing was to be artificial—everything was to be as in its wild state. He was a landscape artist and had been engaged to paint an estate and when the owner saw how he had "beautified and improved" it, he was engaged to carry out these suggestions on the ground and thus started the period known as the naturalistic. was followed by Sir Uvedale Price, an author, and Lancelot Brown, commonly known as "Capability Brown", from his habit of speaking of the capabilities of places upon which he was engaged. None of these men were trained in architecture or even in horticulture, and yet to their unskillful hands were entrusted beautiful old gardens that had existed for centuries and bade fair to become as softened and mellowed by time as the old Italian villas. They proceeded to tear out all that they possibly could of the old garden features, destroying all formal portions and replacing them with native flora as much as possible,



Fig. 8-Well designed architectural detail from an Old World garden

even going to the length of planting dead trees and training streams to meander. The house opened directly out into what was supposed to resemble a virginal forest—undisturbed by nature, and there was no transition provided for the various portions of the grounds. Kent's favorite style was the Chinese and he tried as closely as possible to imitate their ideas about gardening, but he was not successful in this as in his informal idea, for the elements of gardening had no symbolism to a people such as the English, whose very ideals of life were of a formal order.

SIR HUMPHRY REPTON

In 1803 a man appeared who was destined to begin the work of reformation and in a measure bring gardening in England out of the



SIR HUMPHRY REPTON.

Fig. 9

chaos into which it had fallen. This man was Humphry Repton, a man of great talent both in architectural drawing and in the knowledge of horticulture. [He was educated both in England and in Holland: and it is supposed that he learned a great deal from the Dutch gardeners and their love of plants, which later led him to take up this profession with so much success. His father prepared him to be a merchant, which he was for several years until misfortune overtook him and he retired to his country place. Here he lived for many years taking a great interest in agricultural work and the beautifying of his home grounds. On the death of Price and Brown he became the foremost man in the profession in England, and in fact was the first man to consider his

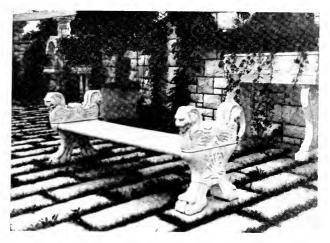


Fig. 10—Many of the small architectural features used in American gardens are replicas or adaptions of famous European examples

work along these lines as a profession. He adopted the title of "Landscape Gardener" and was conceded even by Price to be at the head of his profession.

He believed in an organized plan, using plant materials to help create the desired effect; and he believed in using the materials of the problem in the best possible way to enhance the plan. He was the creator of what we now call the English lawn, a broad stretch of turf with plants in masses about the building and the corners, but not as straggly specimens dotted over the lawn, as had been the case in the time of Kent.

He believed the fundamental of design in landscape gardening to be as follows: The entrance drive, which might be elaborate or simple, as depended on the taste of the owner; the service portion which should be concealed from the rest of the house, and the pleasure gardens which he considered as an outdoor room to the house. Considering an estate as a composition, he divided the distance as follows: immediate foreground which to him included part of the house, the middle distance with its tree groups to aid the view, and the view

itself which included the whole vista of the garden scheme. He always considered the garden as very closely related to the house—as a part of the house plan. $^{\top}$

Today we find the owners of these old estates in England gradually restoring them to their former wonderful beauty and grandeur. Much of this restoration is due to the influence of Repton and his writings. In America we have suffered from this naturalistic fever, but happily our gardens are not so old nor so elaborate that much harm has been done.

CHAPTER II

DESIGN

OMPOSITION in any artistic work may be defined as the putting together of lines, masses and colors,—for the purpose of securing harmony. The first requirement for good composition is the arrangement of the several elements used in the design, with the idea of their decorative value being secondary. A line may be defined as the boundary of shape; a mass as the area within the line. To understand well the requirements of a good design, we must understand the relation of lines, masses, and colors. The fundamental lines of a design are the lines of construction.

In the early American architecture, especially in the colonial house, we have a good illustration of the fundamental lines of construction of the building employed as a decorative element in the composition. The use of heavy timbers in the frame work of the house, and the emphasis of these lines on the outside as a decorative element in the composition, divides the space of the outside of the building into pleasing areas.

The first requirement of a composition of this kind is the spacing of the main lines. The ground work or basis of the composition is the spaces themselves, and their relation to each other. In a simple garden plan in which the garden occupies a square, and the problem is the arrangement of the walks and areas for the cultivation of flowers, the number and width of the paths will determine the shape and size of the flower beds. In this plan, which is essentially formal, we have the emphasis on the lines. In the informal plan, in which we have practically the same sized space divided up into areas which vary in shape according to the location of the walks, we have the emphasis on the spaces themselves, and the interest is here centered on the general shape, size, and the location of the spaces with reference to each other.



Fig. 11-A modern American garden

In the analysis of any garden plan, the same principles apply that are used in the study of a picture. Here we study a composition just as an arrangement of lines which are the boundaries of the spaces. In any good composition one type of line predominates. For instance, in a composition in which the fundamental lines are horizontal, all other lines in the composition are subordinated to these. On the other hand where the main lines are vertical, we have the other lines of the composition subordinated to the vertical. In any picture or plan, the arrangement of lines becomes a source of pleasure to the observer if the composition has been well worked out. We have in all composition two types of pictures, the one which is known as the representative, and the other as the decorative. In the representative type, the pleasure or interest to be derived by the observer will depend upon the understanding of the meaning of the picture. In the other type, the decorative, the arrangement becomes the source of pleasure. To be satisfactory, both should have good composition.

A view of a landscape to be satisfactory, should have some definite limitations. In all landscape work, the views count as pictures, to be seen from different points. There are three types: first, the formal vista, in which the interest is usually in the materials used in the long lines which border the vista, the view at the end becoming secondary. Second, the informal vista, in which the view itself becomes the interesting feature, and the plant materials or architectural features used to frame the view are secondary. The third type, or panorama, consists of a formal composition in which the different areas furnish the interest.

For the purpose of study any composition may be analyzed as possessing all or part of six principles or requisites: opposition, transition, subordination, repetition, symmetry, and variety.

This analysis of composition may be applied equally in both city and country. The only difference is in the things to be seen, although the same elements of composition are there. In analyzing a composition we divide it, or it divides itself, into three sections: foreground, or immediate view; middle distance (just beyond the foreground, or a little less importance); and the distance, or background. Any picture, illustration or view, or in other words, any composition has these three main elements.

We see in a composition the following elements: line, notan or value, and color. We recognize objects first by outline. When we see our friends coming down the street, while they are yet too far away to recognize them by the color of their dress, or by any other means, we recognize them by their form or outline. Thus in composition of any kind, we recognize the objects portrayed because we have learned that this or that outline—combination of lines—is this or that object. We next recognize the value or shading of the composition, whether it be light or dark. For instance, if the sky be overcast, we say it pictures rain; if the sun be shining brightly, and the general effect of the composition is that of light, it denotes clear weather to us. Then, too, the light and shade, or value, serves to bring out the salient features in the composition,—to draw our attention to that which it is most important that we should see. The third means of recognizing the objects in a composition, is color.

Composition is the art of forming a whole by uniting different parts. Composition is divided into the following parts: opposition,

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Fig. 12-A charming feature upon a country estate in America

which means the meeting of two lines to form an angle and which gives accent where they "oppose" each other; transition, the breaking up of lines forming angles so that the interest may center on certain accented points,— often done by the use of curved lines; subordination, the subordinating of certain lines in order to bring out cer-

tain lines,—may be accomplished by repetition or by the use of different types of lines: repetition, the use of the same type of line over and over to aid in subordination; symmetry, the use of parallel lines and axes; variety, the arrangement of lines of different types to break up the sameness,—may be accomplished by use of different lines or using lines in different ways.

The danger in composition is usually that of securing too much variety and detracting from the repose of the picture.







